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Essay
on
Acute Hepatitis
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There is scarcely any disease exhibited in the long catalogue of complaints to which the human system is subject, whose character is more distinctly marked than Acute Hepatitis, designed to be the theme of the following essay. Capable in its nature of being generated by an infinite number of causes it cannot with propriety be said to have any local residence. On the contrary, in every region whose soil has been imprinted by the footsteps of civilized man, it may be said to have a home. Nor is it confined to the walks of civil life. The savage of the desert, a child of nature, a stranger to the luxuries exhibited in the banqueting rooms of modern refinement, slaking his thirst at the limpid stream, appeasing the cravings of appetite with the simplest fare, might be supposed invulnerable to its attacks, comparatively exempt as he may be from its ravages, he, nevertheless, is a subject of its power, ~~[illegible]~~ and may die in its grasp— Springing as it does from an almost infinite number of sources, the laws which govern it and the

symptoms which mark its progress might be supposed to conform to their variety, this is however far from being the fact, whether it has its origin in the frozen regions of the north, or in the burning sands of the south, a few laws slightly varied, serve for its government. whilst the same symptoms direct the eye of the skillful practitioner to a successful investigation of its nature, It cannot be denied that some climates are more genial to its production than others, in the southern part of the United States, and in all warm climates, particularly in the East and West Indies, it finds more prolific sources of generation, than any where else. Hepatitis is usually ushered in by acute pain in the right Hypochondrium, sympathetic pains in the left shoulder, a short hacking cough, sometimes attended with bloody expectoration, The alvine evacuations, deficient in quantity, and of a clay colour, shewing a deficiency of bile in them, on applying the hand over the region of the liver, a sense of

hardness will be frequently manifest to it whilst a degree of pain, proportionate to the pressure, will be invariably conveyed to the patient. added to these the difficulty of lying, but on the affected side, constitute the most prominent features of the incipient or acute stage of Hepatitis. When any or all of the preceding symptoms develop themselves we may without much hazard decide the nature of the disease If there should exist with them any ambiguous symptoms, tending to throw a veil of doubt over the subject, by resorting to the following test suggested by Professor Chapman to his class, the most conclusive testimony may be obtained in a majority of cases. Let the patient be placed on his back in a horizontal position, then elevate his knees, with a view to flex the abdominal muscles, cause him to make a deep and long inspiration and then to expire in the same ratio, the liver if much enlarged will immediately protrude below the false ribs, and may be distinctly felt by applying the hand to the part. It will

at once suggest itself, that although the plan recommended by Professor Chapman, however certain it may be to detect any extensive affection of the liver, is wholy incompetent to the task, in its incipient stage, when its progress is necessarily small — Thus, that although we may decide with certainty on its Hepatic character if the symptoms can be felt, we are not hastily to determine against its existence, in the absence of that decisive symptom. Since there are but few diseases with which it can be compounded, (indeed I know of but one, and that is Phthisis Pulmonalis) we may safely in the presence of a sufficient number of the symptoms already mentioned, proceed to treat it for Hepatitis. In doing so we cannot materially err, for the symptoms in the incipient stage of both diseases, indicate the same mode of treatment — Of the remote causes chiefly concerned in its production — exposure to an excess of either heat or cold, violent exercise, inordinate indulgence of animal appetite in eating or drinking particularly the latter — or any cause calculated to weaken the props of vitality

may be considered the most efficient, I am very much disposed to entertain a belief that a majority of Hepatic cases occurring in the United States, particularly in its Southern division, might be oftener traced to mismanaged and ill cured intermittent and other fevers of a bilious type, than to any other individual cause. To illustrate my views of this subject I must beg leave to digress somewhat from the original. That febrile diseases of the character alluded to, have their primary origin in the stomach, and are extended thro' the agency of sympathy, till the whole of the chylopoietic viscera become involved in them, is to me as apparent as that the sun gives light at midday. In the cold stage of fever, the cause that produces congestion in the liver is perfectly intelligible, first between the stomach and liver, there exists an evident and intimate sympathy. The fact, that they are colleagues in the great work of assimilation, is sufficiently demonstrative of their intimate relation

The germ of fever, then having been applied to the stomach, and operating as a powerful and morbid stimulus upon it; its healthy action is for a moment suspended, or in other words a disease usurps the place of its healthy action. The surface sympathises with it, the blood (as is evident from the pallid appearance it presents) retires from it and is precipitated to the interior; congestion in the liver is the inevitable consequence, which being already predisposed to disease, is the more susceptible to morbid impression. But it may be inquired, is not this stage succeeded by a hot one and is not that in turn succeeded by a sweating one, at the expiration of which healthy action is restored, and healthy action being perfectly restored, is it not evident that disease has been eradicated. First I reply, by stating a simple fact that the disease has a constitutional predilection to return after a definite intermission, and its returning is proof that morbid action has only been suspended

Secondly, that although it may not return, the liver, from being originally, ~~and~~ sympathetically affected, has taken on in a greater ~~measure~~ or less degree, a morbid action, independent of the original impulse; so one which requires the application of remedial agents, differing essentially from those which would have been required in the forming stage of the original disease. When, then, instead of employing prompt and efficient measures to relieve the system of the burthen which oppresses it, by cleansing the stomach of its vitiated contents by vomiting, and causing, by active mercurial purges, the liver to ~~discharge~~ empty its contents: the physician is silently attending to the operation of the vis medicatrix naturæ, first to give her time to concoct a supposed vitiated matter in the fluids, and then to throw it out by the emunctories, resorting to diaphoretics before arterial action is subdued, and administering stimulants where an over-propulsion already exists; the consequence of this mal-practice must be

inflammation of the liver, terminating in Hepatitis, is fairly established and as distinctly formed, as it could be produced by any other cause, for the constitution contending against remedy and disease, either of which may form an outlet for life, must triumph over both, or fall in the unequal conflict; or should it escape immediate annihilation, have Hepatitis, inevitably entailed on it. It is a subject, which I approach with more reluctance than I can readily express but as it comes fairly within the sphere of the discussion, I feel that it is my duty to express my sentiments, without reserve upon it, And I supported by the tenor of the case when I assert it, as my religious opinion that a considerable proportion of Hepatic cases, that occur are the offspring of cruel practice in bilious fevers, and that this cruel practice is fairly chargeable to a too extended belief in the doctrines, promulgated by the humoral pathology; its disciples have been numerous

and amongst them may be ranked some of the brightest stars that ever shown in the constellation of medical science. against this galaxy of virtue and wisdom, the voice of calumny and detraction would be raised in vain, but this veneration for the medical sages of other days, so far from having the effect to repress the freedom of inquiry into the accuracy of the views which they left us on the subject, should stimulate us, to follow in their celestial track, to prosecute the investigation of a science, glorious beyond any other because it seeks the alleviation of human misery, and when we reflect that the science of medicine, even in this enlightened age, is in many parts, obscured by clouds to penetrate which an infinite eye seems alone to be competent, it cannot be considered sacrilege even the humblest member of the profession, to enter the tribunal of justice, and freely approve or condemn as his judgment directs —

this is a theme boundless as the universe. but I must not allow myself to forget the humble space I fill in the profession, and will content myself with the simple declaration that my opinions are in entire coincidence with those who regard the solids as the sovereign disseminators of diseased action, to the adoption of these opinions I have been guided by a light of unrivalled brilliancy, to be enabled to follow in the path irradiated by its beams, and to shine with lustre borrowed from its inexhaustible resources forms the limits of my ambition. The long and continued application of cold to the body, is invariably followed by visceral congestion, sometimes its deleterious effects may remain invisible for a length of time, and then burst upon the view with all its accumulated violence. Thus a man in the days of his youth may have been much exposed to its influence, and by the agency of a strong constitution live on for an indefinite term without

feeling any inconvenience from it, until this lurking enemy which has been so long preying on his mortality either triumphs over every difficulty by its long and continued perseverance, or is called on and aided in making a more violent effort, by some exciting cause, and then appears as I have before observed, Heat (which in order ought to have been first mentioned) may also be considered a powerful agent in the production of Hepatitis. Applied in excess, to a protracted period, it excites the heart and arteries to a more violent action and by the increased impetus of its circulation, inflammation is produced — Of the precise modus operandi of these agents in the production of inflammation, I am not sufficiently acquainted to advance an opinion even satisfactory to myself. The cause of inflammation, perhaps, involves as much doubt, and presents as many difficulties to its perfect comprehension, as any subject that has been exhibited to the test of medical opinion

If this were not a fact, so many eminent, yet different opinions would not exist on the same subject! That they are both powerful stimulants, exciting by a power, independent of any chemical or mechanical principle the heart and arteries to a more violent action deleterious or otherwise as circumstances may direct, I certainly believe, but a simple increase of the circulation does not constitute inflammation, a slight bodily exertion or a paroxysm of joy exhibit all these phenomena. The pulsation of the heart, the vibration of the arteries, are visible, yet inflammation is not the consequence of this preternatural excitement. Upon the ruins of the humoral pathology a medical theory has been erected which confers on the nervous system (to the exclusion of every other) the primary dispensation of diseased as well as healthy action. Being disposed to concede to them this prerogative to its utmost extent, I can easily imagine that irritation may be produced by nervous influence and that whenever it occurs

congestion must follow. The part then in which congestion has occurred being called on to make an effort to relieve itself of the pressure, and failing, by the manifest superior strength of the oppressing cause, is weakened in the unequal conflict and subjected to inflammation. The stimulus of heat or cold, then, having been applied, may be the cause of nervous excitement - nervous excitement is the cause of an increase of arterial action - The powers of the circulation, being thus preternaturally excited, is in obedience to a supreme law of the circulation, directed to some indefinite part which had been simultaneously irritated. If the part thus oppressed by a redundant quantity of blood, is not able to react and by that reaction to relieve itself, it is debilitated, and subjected as has been before observed, to inflammation - I do not wish to be understood, to contend that it is essential to the production of inflammation, that the fountain of the circulation (to wit, the heart) should be preternaturally excited. The arteries

possess a power by which the blood is made to circulate in them, independent of the heart. They may therefore be preternaturally excited and produce inflammation perfectly independent of the heart or the general circulation. All this however does not explain why inflammation should locate itself in the liver, in preference to any other part, nor would I venture to affirm that it has any particular predilection for that ~~part~~, viscus. I am only advocating the opinion, that the mechanical application of either heat or cold, is competent to the generation of inflammation, and that inflammation thus generated may locate itself in the liver. Perhaps I am justifiable in maintaining ~~the~~ the opinion that the liver is peculiarly subject to be injured by inflammation. Considering that inflammation is the consequence of diminished action, and that the circulation in the liver is comparatively sluggish and inactive, it will be apparent at one view, that its powers of combating disease in the same proportion feeble, by way of

illustration suppose that inflammation existed in every organ sensitive to vitality, it is not impossible, that while by a more active circulation every other part might be enabled to rise itself of the oppressing cause - the liver alone for the want of that activity, would remain in a diseased condition. — — —
The incipient stage of acute Hepatitis being highly inflammatory it is uniformly characterized by great febrile action, indicated by a hard, full and quick pulse, and calls loudly for the extensive adoption of the antiphlogistic mode of treatment. Proceeding to conduct the practice upon the general principles of inflammation we should resort to copious venesection and with a view to derive all the benefit which the remedy is competent to afford, the quantity should be large in proportion to the character of the inflammation exhibited, and it should be as suddenly abstracted as possible by opening a large orifice and speedily drawing off the blood, its salutary effect is very much increased, Blood-letting, conducted upon these principles, answers

a double indication, first by detracting from the circulating mass it abates the force and frequency of the pulse, subdues febrile action and alleviates pain. Secondly, it tends more effectually to counteract the morbid determination of blood to the liver. To explain the difference in the effect of a gradually and speedy abstraction of blood. Let us suppose a determination of blood of a definite force to any part of the system to change that determination, we decide on the efficacy of bloodletting. Now it is evident, that a degree of strength proportioned to the resistance to be overcome, must be applied, and it is equally as evident that the whole of our opposing force brought into immediate action would be more effectual, than if employed in detachments, since in the first instance, the force we employ, being competent to overcome the resistance, succeeds by reason of its manifest superiority, whilst in the second being gradually applied it is gradually overcome by the resistance of the cause, without any important effect having

been produced. I do not think that more conclusive proof could be obtained on any subject, than the following fact adduced in support of the superior efficacy of drawing blood from a large orifice. Actual experiment shows that whilst a quantity of blood may be drawn from a man, through a small orifice, without causing him to faint, half the quantity drawn from an orifice of increased size will produce the effect. I have dwelt upon this subject, because I deem it a very important practical point. But bloodletting valuable and indispensable as it is in the cure of this disease, cannot be relied on, to the exclusion of other depletory remedies we must therefore call ~~on~~ in the aid of its auxiliaries. The bowels will generally (I might say universally) be in a torpid condition, oppressed with a preternatural collection of fecal matter, which, operating as an extraneous substance, assists in keeping up irritation, and aggravates in no ordinary degree, the strength of the morbid symptoms

present in the system. The liver, the throne of the disease, oppressed with a morbid collection of bile, gives origin to symptoms, to the speedy removal of which, the attention of the skillful practitioner will be speedily called. To meet these indications, first to remove the torpid condition of the alimentary canal, secondly to relieve the liver of its morbid contents and to invite a more vigorous and salutary secretion, reason points to the mercurial purgatives as the only efficient remedies in such cases.— I should choose the milder muriate of Mercury to be followed by the exhibition of a dose of Oleum Ricini, in preference to any other assistant purgative. Of the use of Calomel, as a purgative, or indeed of any other remedy in this disease, I cannot say that I speak from the conviction of experience. Judging however by its superior efficacy in restraining morbid secretion of white, a symptom familiar in the history of intermittent fever, in which it is chiefly relied on, reasoning from analogy, teaches me to place it at the

most of all medical agents in the cure of the inflammatory stage of acute Hepatitis. We do not believe that it [illegible] liver are confined simply to its excretory ducts, operating by a principle specifically its own. It evacuates the alimentary canal, extracts its influence to the liver, causes it to pour out its vitiated contents to pass off by the intestines, and stimulates it to a more natural and healthy secretion. I may subject myself to censure for laying so much emphasis on the supposed specific nature of its operation, but in ascribing specific virtues to it I am borne up by the highest medical authority of our country. (I do not mean to say that I am supported in the opinion, that it exerts a specific effect on the liver, when exhibited and operating as a purgative.) But I speak from the authority of Professor Chapman, when I say that every remedial agent, no matter what its rank may be, in the Materia Medica, operates in some degree by a power specifically its own. Nature herself testifies to the truth of this Theory, — when

she, in her animal, vegetable, and mineral kingdoms, extended and diversified as they are has with so careful a hand, distinguished them by such visible peculiarities. This plan is based on infinite wisdom. without it, all would be disorder and confusion. Why medicine alone should be excluded from it, remains to be satisfactorily explained by the opponents of the theory. That the influence of calomel (given as a purgative) on the liver, when compared with mercury given to produce its alterative effect or to salivate, is inconsiderable I most willingly concede, but that in some degree an alterative effect is produced I most firmly believe — Depletion having been extended to a sufficient degree and arterial action subdued, we may then resort to blisters, to be applied immediately over the region of the liver — Blisters applied here, acting by virtue of a stimulating principle, specifically their own, invite a determination of blood to the surface, remove morbid congestion in the liver, eradicate or relieve any rem-

ment of pain that may be present and finally tend to break up the morbid train of actions going on in it, and cause it to take on a more healthy and salutary secretion. The plan of treatment that, based down, aided by a strict antiphlogistic regimen will generally succeed in removing an acute disease of the liver, if it is not of a constitutional or hereditary diathesis, in which case it is very apt to run on to the chronic stage. But though we may seemingly succeed in eradicating every hepatic symptom, I doubt the propriety of stopping here. Inflammation of glandular organs so much prone than which is common to other parts of the system, it is so much disposed to assume a constitutional form, that I think, sound policy strictly warrants us in resorting to the use of mercury, to be given with a view, to procure its alterative effect. To effect this purpose the preparation of mercury I should prefer would be, the blue pill, to be continued until the gums of the patient are slightly affected. In some cases I should combine with it.

the Nitro Muriatic acid, the so much extolled remedy of Dr Scott in Hepatitis, to be given as laid down by Professor Chapman in his Therapeutics. I have not intended to say that I would postpone the application of mercury in this disease until the Hepatic symptoms had entirely disappeared, on the contrary I would resort to it as soon as the system, by active depletory remedies, had been prepared for its reception. my meaning is simply this, if ~~that~~ I were called to a patient labouring under a well developed case of Hepatitis, I would use mercury ~~mercury~~ as I have stated though its symptoms should disappear under the preparatory treatment. During the exhibition of the mercury it will be essentially necessary to keep down arterial action else the alterative effect of the remedy cannot be produced. So do this venesection will be found to answer the best purpose — Feeling it to be a part of my duty to offer something in the shape of a reason, for the use of every remedy I have proposed, for the

cure of this disease; I hope it will not be considered a trespass on your time if I make a retrograde movement in the description, to explain my reason for procrastinating the application of a blister, until, by the use of depletory measures arterial action had been subdued. The propriety of delaying the application of blisters in all diseases characterized by morbid increase of arterial action until by depletion, that action has been lessened, constitutes one of the most prominent features in the character of the theory of Professor Chapman. It appears to me to be a fact too firmly fixed, to be successfully assailed, that the immediate efficacy of blisters resides exclusively in their stimulating properties & follows, exerted through the medium of sympathy. It follows therefore as an inseparable consequence that if applied during the existence of great inflammatory action they must aggravate the disease. I have before observed that they operate by a stimulating power specifically their own, but like every thing

else. their strength is circumscribed. If applied to subdue a degree of strength less than their own. they will succeed by virtue of the specific stimulus which they possess. If however they come in conflict with a strength superior to their own. they will be deprived of the power of exerting their remedial virtues and converted into fuel to feed the flame they were intended to extinguish. For the reason then. that where they do not succeed in eradicating the disease, they invariably augment its violence. I think it necessary to postpone their exhibition. until arterial action has been subdued or diminished - I am not disposed to deny that many cases of acute Hepatitis may and do occur in practice of a character too obstinate to yield to a mild use of mercury. and yet completely amenable to a more extensive employment of it. whilst in such a case I should certainly carry its exhibition to its utmost extent. I think it the duty of every practitioner first to attemp its removal by exciting its alterative effect. Mercury in

the present state of medical science stands unrivaled in the Materia Medica. but I trust the time is not far distant. when disease will be made to acknowledge the sovreignty of the healing art. without its having recourse to the horrid effect of a salivation. from the intimate sympathy that exists between the stomach and liver. I have no doubt. that in many if not in all cases of acute Hepatitis, emetics might prove highly useful. A sea voyage. I would always recommend believing as I do that its modus operandi is particularly applicable to the cure of diseases. marked by a billious diathesis. On the subject of diaphoretics I have been silent. their utility in subduing febrile action is too manifest to be doubted. and consequently venesection having. with other depletory measures. been premised they will prove valuable auxiliaries in combating inflammatory symptoms. to meet this purpose the Antimonial powders are prescribed, as Calomel enters into their composition I have no doubt of their superior efficacy over any other diaphoretic preparation. —